

Figure 1B

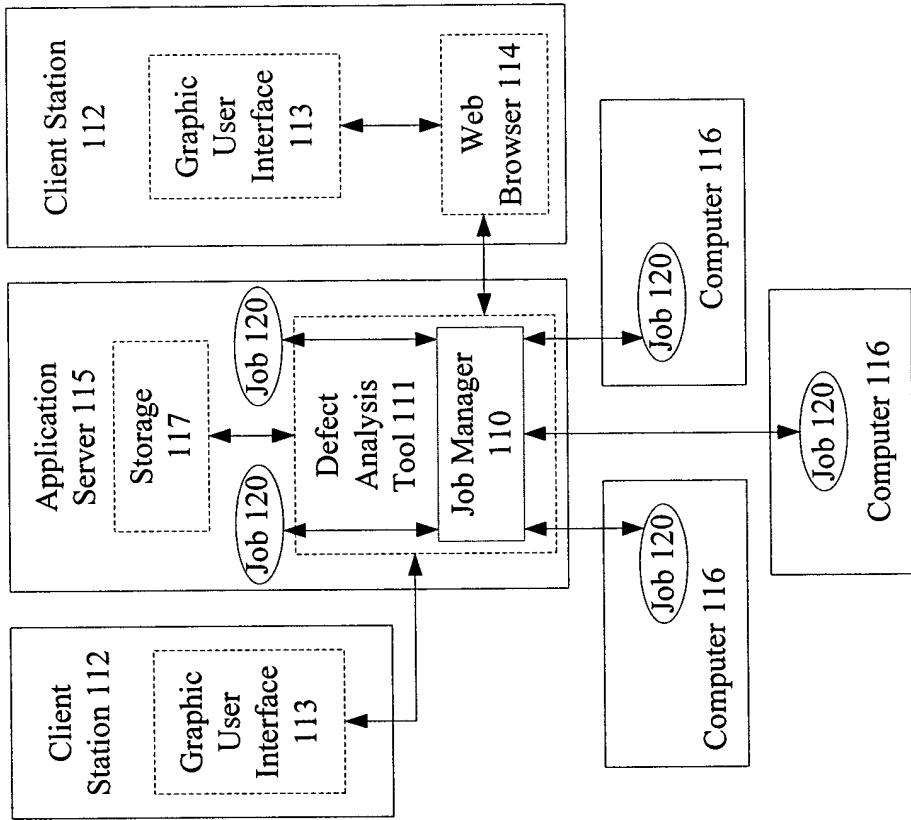
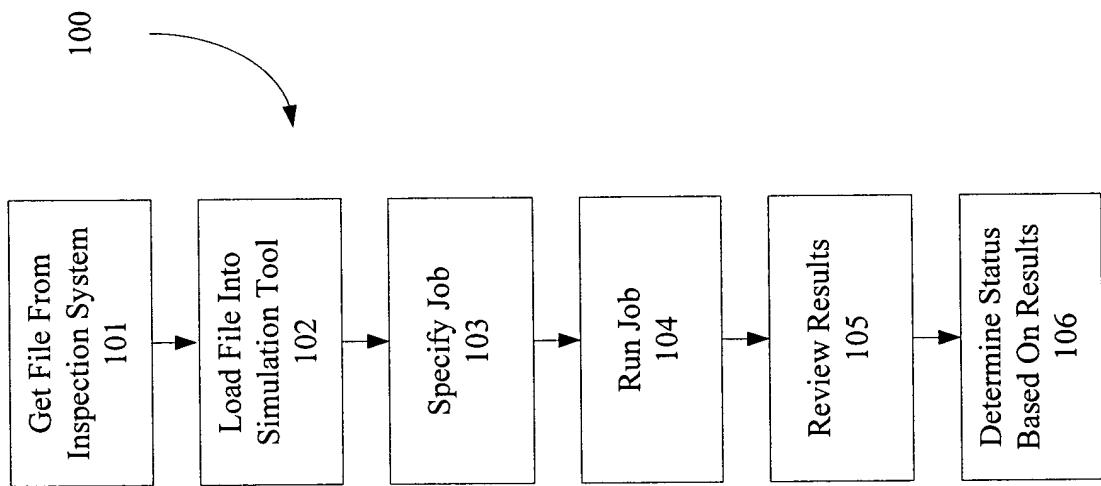


Figure 1A



logoff

Virtual Stepper System	
Settings	
Stepper Setting	Name <input type="text" value="AP Mask"/>
Inspection System	Type <input type="radio"/> ATT-PSM <input checked="" type="radio"/> ▶
Job	Phase (degree) <input type="text" value="180.0"/>
Run	Transmission (%) <input type="text" value="6.0"/>
Review	<input type="button" value="Add"/>
Level 1	
Level 2	
Level 3	
Administration	
Group Setup	<input type="checkbox"/>
Account Setup	<input type="checkbox"/>
Data Backup	<input type="checkbox"/>
Data Restore	<input type="checkbox"/>
Job Server	<input type="checkbox"/>
Status Check	<input type="checkbox"/>
Maintenance	
Delete All	<input type="button" value="Delete"/>
Security	<input type="button" value="Update"/>

Figure 2

Virtual Stepper System		logoff																			
Settings	Name Stepper 1	Name Wavelength NA	300 Add																		
Stepper Setting	248	0.57	301																		
Inspection System	4.0	302	Advanced																		
Job	Reduction	Defocus	Illumination																		
Run	Single ▾	Angular ▾	302																		
Review	Level 1	Level 2	Level 3																		
Administration	<table border="1"> <thead> <tr> <th>Stepper Name</th> <th>Wavelength</th> <th>NA</th> <th>Reduction</th> <th>Illumination</th> <th>Edit</th> </tr> </thead> <tbody> <tr> <td>Stepper 1</td> <td>248</td> <td>0.57</td> <td>4.0</td> <td>Angular</td> <td>Edit</td> </tr> <tr> <td>Stepper 2</td> <td>365</td> <td>0.65</td> <td>2.5</td> <td>Circular</td> <td>Edit</td> </tr> </tbody> </table>			Stepper Name	Wavelength	NA	Reduction	Illumination	Edit	Stepper 1	248	0.57	4.0	Angular	Edit	Stepper 2	365	0.65	2.5	Circular	Edit
Stepper Name	Wavelength	NA	Reduction	Illumination	Edit																
Stepper 1	248	0.57	4.0	Angular	Edit																
Stepper 2	365	0.65	2.5	Circular	Edit																
Group Setup	<input type="checkbox"/>																				
Account Setup	<input type="checkbox"/>																				
Data Backup																					
Data Restore																					
Job Server																					
Status Check																					
Maintenance	<input type="button" value="Delete All"/>			<input type="button" value="Update"/>																	
Security																					

Figure 3

Virtual Stepper System		logoff												
Settings	Mask Setting <input type="button" value="Stepper Setting"/> <input type="button" value="Inspection System"/>													
	Name	<input type="text" value="INS1"/>												
	Vendor	<input type="text" value="KLA-Tencor"/> <input checked="" type="checkbox"/>												
	Model	<input type="text" value="SLF-27"/> <input checked="" type="checkbox"/>												
Job	<input type="button" value="Run"/> <input type="button" value="Review"/>													
	Level 1	<input type="checkbox"/>												
	Level 2	<input type="checkbox"/>												
	Level 3	<input type="checkbox"/>												
Review														
Administration	<table border="1"> <tr> <td>Name</td> <td>Vendor</td> <td>Model</td> <td>Edit</td> </tr> <tr> <td>INS1</td> <td>KLA-Tencor</td> <td>SLF-27</td> <td><input type="button" value="Edit"/></td> </tr> <tr> <td>INS2</td> <td>Lasertec</td> <td>MD2100</td> <td><input type="button" value="Edit"/></td> </tr> </table>		Name	Vendor	Model	Edit	INS1	KLA-Tencor	SLF-27	<input type="button" value="Edit"/>	INS2	Lasertec	MD2100	<input type="button" value="Edit"/>
Name	Vendor	Model	Edit											
INS1	KLA-Tencor	SLF-27	<input type="button" value="Edit"/>											
INS2	Lasertec	MD2100	<input type="button" value="Edit"/>											
	<input type="button" value="Delete All"/>	<input type="button" value="Update"/>												
Maintenance														
Security														

Figure 4

Virtual Stepper System

logoff

Settings	501	500												
Mask Setting	Start Date <input type="button" value="2003-2-3"/> End Date <input type="button" value="2003-2-26"/>													
Stepper Setting	<input type="button" value="Go"/>													
Inspection														
System														
Job	502	503												
Run	<input type="button" value="Full"/>													
Review	<input type="button" value="Select All"/>													
Level 1														
Level 2														
Level 3														
Maintenance History														
<table border="1"> <thead> <tr> <th>Record ID</th> <th>MaskID</th> <th>SerialNo</th> <th>Creation Time</th> </tr> </thead> <tbody> <tr> <td>17</td> <td>skull</td> <td>squad</td> <td>02-26-03:01.36.48</td> </tr> <tr> <td>18</td> <td>uuu2</td> <td>111</td> <td>02-25-03:04.13.27</td> </tr> </tbody> </table>			Record ID	MaskID	SerialNo	Creation Time	17	skull	squad	02-26-03:01.36.48	18	uuu2	111	02-25-03:04.13.27
Record ID	MaskID	SerialNo	Creation Time											
17	skull	squad	02-26-03:01.36.48											
18	uuu2	111	02-25-03:04.13.27											
Administration Group Setup <input type="checkbox"/> Account Setup <input type="checkbox"/> Data Backup <input type="checkbox"/> Data Restore <input type="checkbox"/> Job Server <input type="checkbox"/> Status Check <input type="checkbox"/> <input type="button" value="Maintenance"/> <input type="button" value="Security"/>														
<input type="button" value="Import Results"/>														

Figure 5

Virtual Stepper System	
Settings	600 Select Mask, Stepper Setting, Job Type <u>601</u>
Mask Setting	Masks In Queue Stepper Settings Job Type Spurs: 1024 ▼ step1 ▼ ADSS ▼ Wavelength=248.0, ▲ Coherence=0.75, NA=0.57, □ Illumination=Circular, ▼
Stepper Setting	Link To Previous Inspection Run <u>602</u>
Inspection System	<input type="checkbox"/> Reuse Old Recipe
Job	Review Level 1 Level 2 Level 3 Run
Review	Simulation Setting <u>603</u>
Level 1	Minimum Dark Background Maximum Bright Background Advanced
Level 2	0 226
Level 3	
Administration	ADSS Setting <u>604</u>
Group Setup	ADSS Mode ADSS Scoring
Account Setup	Line Spacing ▼ Red □ Green □ Yellow □
Data Backup	
Data Restore	
Job Server	
Status Check	
Maintenance	
Security	

Figure 6A

Virtual Stepper System	
Settings	Threshold Setting Tolerance <input type="text" value="-10"/> % - <input type="text" value="10"/> %
Mask Setting	605
Stepper Setting	
Inspection	
System	
Job	606
Run	<input checked="" type="radio"/> Use Auto Thresholding
Review	<input type="radio"/> Wafer CD = (Mask CD/Reduction) + <input type="text" value="10"/> Bias (nm)
Level 1	<input type="radio"/> Mask CD
Level 2	<input type="radio"/> Wafer CD
Level 3	<input type="radio"/> Use Manual Thresholding 607
Administration	Nominal Threshold Threshold
Group Setup	
Account Setup	
Data Backup	
Data Restore	
Job Server	
Status Check	
Maintenance	Process Window Range 608
Exposure	<input type="text" value="-5"/> % - <input type="text" value="5"/> %
Defocus (nm)	<input type="text" value="0"/> ▶ - <input type="text" value="0"/> ▶
Security	
	logoff

Figure 6B

Virtual Stepper System		700	logoff
Settings	Mask Setting Stepper Setting Inspection System	Inspection System: <input type="text" value="uv305"/> ▶ Created Between: <input type="text" value="02-26-03"/> ▶	<input type="button" value="Search"/>
Job	Run	To: <input type="text" value="02-27-03"/> ▶	
Review		Lot Name: <input type="text" value="All"/> ▶	
	Level 1 Level 2 Level 3		
Administration	Group Setup Account Setup Data Backup Data Restore Job Server Status Check		
Maintenance			
	Security		

Figure 7

Virtual Stepper System	
Settings	800
Mask Setting	801
Stepper Setting	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Inspection System	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Job Run	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Review	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Level 1	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Level 2	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Level 3	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Administration	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Group Setup	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Account Setup	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Data Backup	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Data Restore	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Job Server	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Status Check	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Maintenance	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Security	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Figure 8

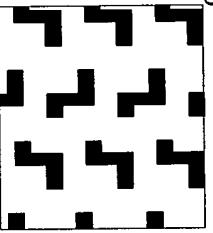
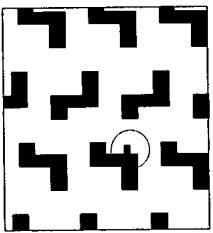
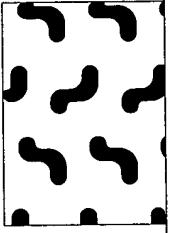
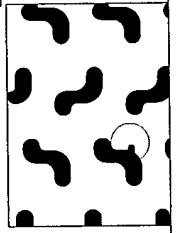
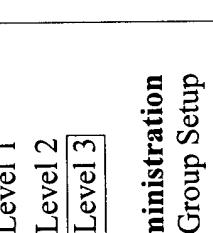
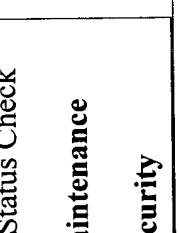
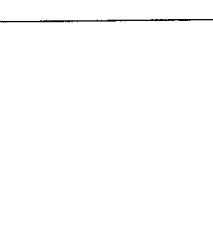
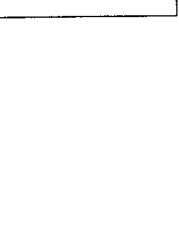
Virtual Stepper System	
	900
	logoff
Settings	File Selection Manual Zoom Aerial Image Analysis Help
Mask Setting	<input type="checkbox"/> PASS1 <input type="checkbox"/> ADSS <input type="checkbox"/> 10.0 <input type="checkbox"/> Defect <input type="checkbox"/> Status <input type="checkbox"/> History
Stepper Setting	<input type="checkbox"/> Mask <input type="checkbox"/> Report <input type="checkbox"/> Done
Inspection System	<input type="checkbox"/> Defect #1 <input type="checkbox"/> 901 <input type="checkbox"/> 903 <input type="checkbox"/> 904
Job	<input type="checkbox"/> Mask Image <input type="checkbox"/> ADSS
Run	<input type="checkbox"/> Test Transmitted <input type="checkbox"/> 901 <input type="checkbox"/> 902 <input type="checkbox"/> 903 <input type="checkbox"/> 904
Review	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3
Administration	<input type="checkbox"/> Group Setup <input type="checkbox"/> Account Setup <input type="checkbox"/> Data Backup <input type="checkbox"/> Data Restore <input type="checkbox"/> Job Server <input type="checkbox"/> Status Check
Maintenance	<input type="checkbox"/> Security
	<input type="checkbox"/> Comments
	
	
	
	
	
	
	
	

Figure 9

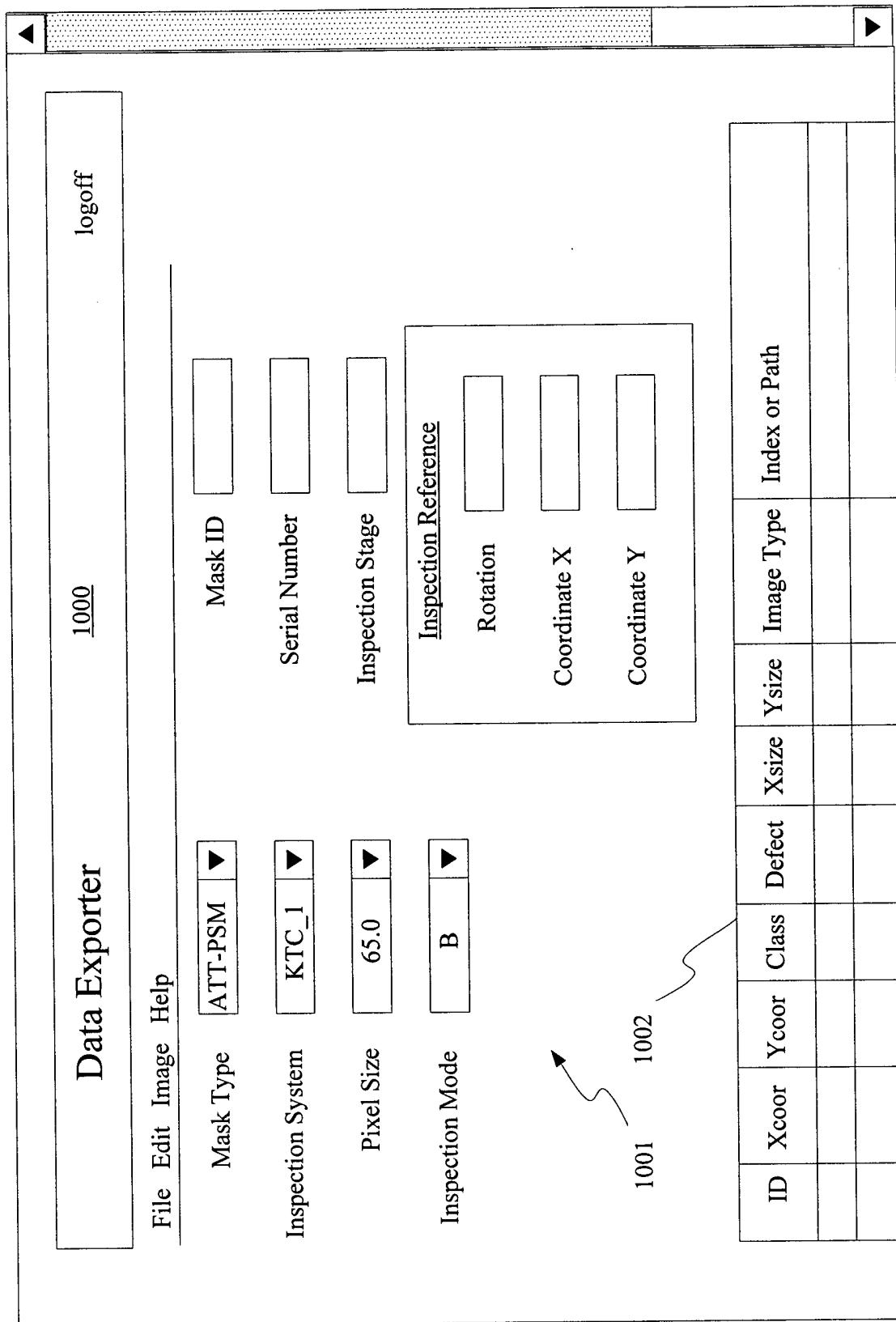


Figure 10